AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the present application.

1-52. (*canceled*)

53. (*previously presented*) A composition consisting of:

water;

one or more monopersulfate compounds;

one or more buffers, at least one of which is selected from the group consisting of alkali metal and alkaline earth metal salt forms of bicarbonate and/or carbonate; and

one or more ketones, at least one of said ketones being selected from the group consisting of acetone, 2-butanone, 2-pentanone, 2-hydroxy-4-methyl-2-pentanone, hexafluoroacetone, trifluoroacetone, acetophenone, camphorsulfonic acid, and levulinic acid,

wherein the composition has a pH of from about 5 to about 9 and is formulated to achieve in situ generation of dioxirane.

54. (*previously presented*) The composition of claim 53, wherein at least one of the monopersulfate compounds is selected from the group consisting of alkali metal salt forms of peroxymonosulfuric acid alone or in combination with the alkali metal salts of sulfuric or persulfuric acid.

55. (*currently amended*) The composition of ~~claims~~ claim 53, wherein the monopersulfate derives from a potassium triple salt compound generally represented by the formula $2KHSO_5 \cdot KHSO_4 \cdot K_2SO_4$.

56. (*currently amended*) The composition of claims 53, 54 or 55, wherein the monopersulfate compound(s) are present in a concentration range of about 1-20% w/v, the buffer(s) are present in a concentration range of about 0.05-20% w/v, and the ketone(s) are present in a concentration range of about 0.1-20% v/v.

57. (*canceled*)

58. (*new*) The composition of claim 53, wherein at least one of the monopersulfate compounds is an alkali metal salt form of monopersulfate.

59. (*new*) The composition of claim 58, wherein the monopersulfate compound(s) are present in a concentration range of about 1-20% w/v, the buffer(s) are present in a concentration range of about 0.05-20% w/v, and the ketone(s) are present in a concentration range of about 0.1-20% v/v.

60. (*new*) The composition of claim 53, 54, 55 or 58, wherein the monopersulfate compound(s) are present in a concentration range of about 0.1-40% w/v, the buffer(s) are present in a concentration range of about 0.05-20% w/v, and the ketone(s) are present in a concentration range of about 0.1-40% v/v.

61. (*new*) A composition consisting of:

water;

one or more monopersulfate compounds;

one or more buffers, at least one of which is selected from the group consisting of alkali metal and alkaline earth metal salt forms of bicarbonate and/or carbonate;

one or more co-solvents; and

one or more ketones, at least one of said ketones being selected from the group consisting of acetone, 2-butanone, 2-pentanone, 2-hydroxy-4-methyl-2-pentanone, hexafluoroacetone, trifluoroacetone, acetophenone, camphorsulfonic acid, and levulinic acid,

wherein the composition has a pH of from about 5 to about 9 and is formulated to achieve in situ generation of dioxirane.

62. (*new*) The composition of claim 61, wherein at least one of the monopersulfate compounds is an alkali metal salt form of monopersulfate.

63. (*new*) The composition of claim 61, wherein at least one of the monopersulfate compounds is selected from the group consisting of alkali metal salt forms of peroxymonosulfuric acid alone or in combination with the alkali metal salts of sulfuric or persulfuric acid.

64. (*new*) The composition of claim 61, wherein the monopersulfate derives from a potassium triple salt compound generally represented by the formula $2KHSO_5 \cdot KHSO_4 \cdot K_2SO_4$.

65. (*new*) The composition of claim 61, wherein at least one of the co-solvents is selected from the group consisting of acetonitrile, tert-butanol, propylene carbonate, propylene glycol, and polypropylene glycol.

66. (*new*) The composition of claim 61, 62, 63, 64, or 65 wherein the monopersulfate compound(s) are present in a concentration range of about 0.1-40% w/v, the buffer(s) are present in a concentration range of about 0.05-20% w/v, the co-solvent(s) are present in a concentration range of about 0.01-40% v/v, and the ketone(s) are present in a concentration range of about 0.1-40% v/v.

67. (*new*) The composition of claims 61, 62, 63, 64, or 65 wherein the monopersulfate compound(s) are present in a concentration range of about 1-20% w/v, the buffer(s) are present in a concentration range of about 0.05-20% w/v, the co-solvent(s) are present in a concentration range of about 0.5-20% v/v, and the ketone(s) are present in a concentration range of about 0.1-20% v/v.

68. (*new*) A composition consisting of:

water;

one or more monopersulfate compounds;

one or more buffers, at least one of which is selected from the group consisting of alkali metal and alkaline earth metal salt forms of bicarbonate and/or carbonate;

one or more surfactants; and

one or more ketones, at least one of said ketones being selected from the group consisting of acetone, 2-butanone, 2-pentanone, 2-hydroxy-4-methyl-2-pentanone, hexafluoroacetone, trifluoroacetone, acetophenone, camphorsulfonic acid, and levulinic acid,

wherein the composition has a pH of from about 5 to about 9 and is formulated to achieve in situ generation of dioxirane.

69. (*new*) The composition of claim 68, wherein at least one of the monopersulfate compounds is an alkali metal salt form of monopersulfate.

70. (*new*) The composition of claim 68, wherein at least one of the monopersulfate compounds is selected from the group consisting of alkali metal salt forms of peroxymonosulfuric acid alone or in combination with the alkali metal salts of sulfuric or persulfuric acid.

71. (*new*) The composition of claim 68, wherein the monopersulfate derives from a potassium triple salt compound generally represented by the formula $2KHSO_5 \cdot KHSO_4 \cdot K_2SO_4$.

72. (*new*) The composition of claim 68, wherein at least one of the wherein at least one of the surfactants is selected from the group consisting of tetrabutylammonium hydrogen sulfate (TBAHS), cetyltrimethylammonium (CTMA) chloride, and octyl phenol ethoxylate.

73. (*new*) The composition of claim 68, 69, 70, 71, or 72, wherein the monopersulfate compound(s) are present in a concentration range of about 0.1-40% w/v, the buffer(s) are present in a concentration range of about 0.05-20% w/v, the surfactant(s) are present in a concentration range of about 0.01-15% w/v, and the ketone(s) are present in a concentration range of about 0.1-40% v/v.

74. (*new*) The composition of claims 68, 69, 70, 71, or 72, wherein the monopersulfate compound(s) are present in a concentration range of about 1-20% w/v, the buffer(s) are present in a concentration range of about 0.05-20% w/v, the surfactant(s) are present in a concentration range of about 0.01-5% w/v, and the ketone(s) are present in a concentration range of about 0.1-20% v/v.

75. (*new*) A composition consisting of:

water;

one or more monopersulfate compounds;

one or more buffers, at least one of which is selected from the group consisting of alkali metal and alkaline earth metal salt forms of bicarbonate and/or carbonate;

one or more co-solvents;

one or more surfactants; and

one or more ketones, at least one of said ketones being selected from the group consisting of acetone, 2-butanone, 2-pentanone, 2-hydroxy-4-methyl-2-pentanone, hexafluoroacetone, trifluoroacetone, acetophenone, camphorsulfonic acid, and levulinic acid,

wherein the composition has a pH of from about 5 to about 9 and is formulated to achieve in situ generation of dioxirane.

76. (*new*) The composition of claim 75, wherein at least one of the monopersulfate compounds is an alkali metal salt form of monopersulfate.

77. (*new*) The composition of claim 75, wherein at least one of the monopersulfate compounds is selected from the group consisting of alkali metal salt forms of peroxymonosulfuric acid alone or in combination with the alkali metal salts of sulfuric or persulfuric acid.

78. (*new*) The composition of claim 75, wherein the monopersulfate derives from a potassium triple salt compound generally represented by the formula $2KHSO_5 \cdot KHSO_4 \cdot K_2SO_4$.

79. (*new*) The composition of claim 75, wherein at least one of the co-solvents is selected from the group consisting of acetonitrile, tert-butanol, propylene carbonate, propylene glycol, and polypropylene glycol.

80. (*new*) The composition of claim 75, wherein at least one of the wherein at least one of the surfactants is selected from the group consisting of tetrabutylammonium hydrogen sulfate (TBAHS), cetyltrimethylammonium (CTMA) chloride, and octyl phenol ethoxylate.

81. (*new*) The composition of claim 75, 76, 77, 78, 79 or 80, wherein the monopersulfate compound(s) are present in a concentration range of about 0.1-40% w/v, the buffer(s) are present in a concentration range of about 0.05-20% w/v, the co-solvent(s) are present in a concentration range of about 0.01-40% v/v, the surfactant(s) are present in a concentration range of about 0.01-15% w/v, and the ketone(s) are present in a concentration range of about 0.1-40% v/v.

82. (*new*) The composition of claims 75, 76, 77, 78, 79 or 80, wherein the monopersulfate compound(s) are present in a concentration range of about 1-20% w/v, the buffer(s) are present in a concentration range of about 0.05-20% w/v, the co-solvent(s) are present in a concentration range of about 0.5-20% v/v, the surfactant(s) are present in a concentration range of about 0.01-5% w/v, and the ketone(s) are present in a concentration range of about 0.1-20% v/v.